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(54) **A bearing lubrication device, an output shaft lubrication device and a process for lubricating an output shaft**

(57) A bearing (131; 132) lubrication system includes a stationary output shaft carrier (150) housed within a gear housing (101) wherein the output shaft (103) resides partially within the carrier and upper and lower bearing (131; 132)s support the shaft. The carrier includes first and second arcuately extending troughs (121; 125) for catching lubricating fluid (201) slung by an oil slinger (141). The first trough (121; 125) is in fluid communication with the shaft and with the upper bearing (131; 132) which pumps fluid (201) through the bearing (131; 132) and into an upper passageway which terminates in an opening which supplies fluid (201) to a second trough (121; 125) which, in turn, supplies fluid (201) to the second bearing (131; 132) which, in turn, supplies fluid (201) to the annular pool formed on the upper portion of the gear affixed to the output shaft (103). The annular pool is formed by a cylindrically shaped dike secured to the upper portion of the gear. Overflow from the pool lubricates the gear and returns oil to the reservoir.

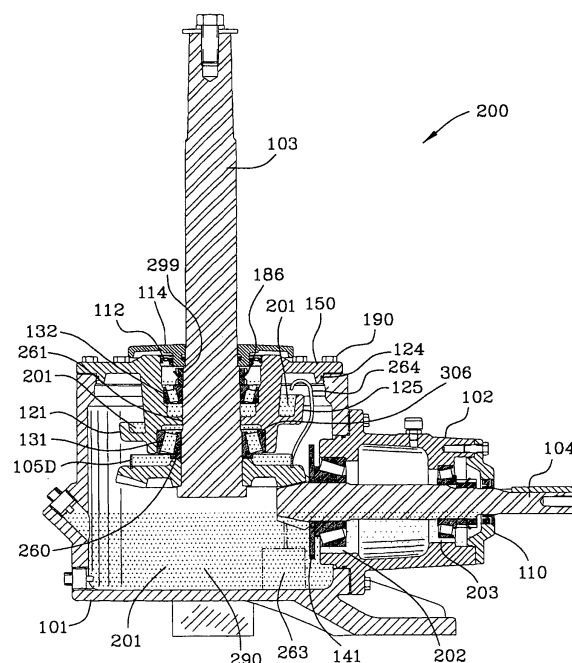


FIG. 2



EUROPEAN SEARCH REPORT

Application Number
EP 06 01 9821

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Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (IPC)
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A	* column 1, line 45 - column 3, line 60; figure 1 *	1-3,8, 10,11, 14, 17-19,23	F16N7/36 F16H57/04 F16H1/14

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The present search report has been drawn up for all claims			TECHNICAL FIELDS SEARCHED (IPC)
			F16C F16N F16H
Place of search		Date of completion of the search	Examiner
Munich		12 December 2008	Fischbach, Gerhard
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	

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EPO FORM 1503 03.82 (P04C01)

**ANNEX TO THE EUROPEAN SEARCH REPORT
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EP 06 01 9821

This annex lists the patent family members relating to the patent documents cited in the above-mentioned European search report.
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